REPORT OF A CASE OF SINUS THROMBUS DUE TO WELCH GAS BACILLUS.*

By E. D. SHORTLIDGE, M. D., San Francisco.

F. D., male, age 29, single, plumber by occupation, born in France, was admitted to the medical service of the French Hospital November 20th with the following history: Has been in the United States about four years and has enjoyed good health during that time. Present illness dates from Sunday evening, the 19th, when he went to a French restaurant and partook heartily of a French dinner. About 10:30, soon after reaching his lodgings, complained of nausea, dizziness and some abdominal pain, followed by vomiting and purging, which continued during the night. In the morning, his symptoms continuing, he remained in bed. His employer, finding that he did not return to work, went to his room and, finding him in bed, had him sent to the hospital, believing his illness was due to ptomain poisoning. His temperature on admission was 98.4°; was put to bed and ordered broken doses of calomel followed by a saline purge. The following morning on making rounds the resident physician found his general condition much improved, but on looking on his pillow noticed it stained with pus which was also flowing from the external auditory meatus. He advised him to go to the clinic and see me.

He was first seen by me at 9 a. m., November 21st; not being able to understand much English, it was necessary to converse through an interpreter. At this time his nausea and vertigo had disappeared and, with the exception of being a little weak, he said he felt well. Between six and seven years ago, while serving in the sanitary corps of the French army, he had an attack of erysipelas, As a sequel he had an attack of acute otitis media in his right ear followed by profuse discharge, which continued for four or five weeks, gradually lessening in amount but never quite ceasing. Says he was treated by French surgeons until coming to this country; since then has not seen a surgeon but has treated the ear himself by washing and then drying it. Has never given him any trouble or caused him to lose any work, but says the present discharge is more profuse than ever before. He appears to be a well-nourished man of about 30 years and looks in good health. There is no spontaneous nystagmus. Examination of right ear shows slight edema over mastoid region with tenderness extending to tip. The external meatus filled with pus, profuse and a very foul odor. The canal at the juncture of the cartilagenous and bony portion is so small from the long-continued discharge that it is almost impossible to introduce the smallest speculae. On account of the tym-panic cavity being filled with granulations it was difficult to distinguish any landmarks. Temperature 99°, pulse 80.

The following tests were made: Weber to diseased ear. Caloric reaction with cold water positive. A diagnosis of an acute exacerbation of a chronic otitis media, probably an infected cholesteatomata was made. The nature of the disease and its danger were explained to him and an immediate operation advised. He was unable to understand why an operation on an ear that had not troubled him since he had the discharge was so imperative, but said he would talk it over with his friends. During the day he decided to be operated on and the time was fixed for the following morning at 10 o'clock. The patient was etherized and the usual mastoid incision was made. On removing the cortical layer of the mastoid, foul and offensive pus under pressure and filled with gas, exuded. The mastoid cells were excenterated and

the tip removed. After removing the tip, a small Bezold's abscess was uncovered, filled with gas. The tympanic cavity and attic were filled with cholesteatomata, which was carefully removed with a curette. In going over the mastoid cavity again with a searcher, a small space over the sinus was discovered. In following this up a perisinous abscess and a dark area somewhat smaller than a ten-cent piece on the sinus with a small granula-tion was discovered. The sinus was uncovered for about 1¼ inches until the vein looked healthy. The question whether to puncture, incise or open freely and pack each end arose, but as the vessel seemed soft and compressible with blood flowing through, it was decided that by relieving the pressure in removing the pus and the bony covering, a thrombus would be prevented. The cavity was packed lightly with sterile gauze saturated with a 25% solution of argyrol and the patient put to bed in good condition. At 8 p. m. his temperature was 100° F., pulse 90. He spent a somewhat restless night, sleeping little, but no pain. At 6 a. m., had temperature 101° F., but at 8 it had dropped to 100.2°, pulse 86, no pain, jugular soft and compressible. About 4:30 p. m., the resident phoned me that the patient had had a chill and his temperature was 104.6° pulse 120. Pacifizing that perature was 104.6°, pulse 120. Realizing that a thrombus had formed, gave orders to prepare for ligating the jugular and lateral sinus. About 5:30 the patient was again etherized. The jugular vein was found to be thrombosed to about the facial vein and was resected from just about the clavicle to the jugular bulb. The lateral sinus was filled with a thrombus from the bulb to the knee, where fluid blood was found. In dissecting in the upper part of the neck the tissues were found infiltrated with gas. The wound in the neck was closed except for a small place for drainage and the mas-toid wound packed with gauze and argyrol solution. On account of a rapid and thready pulse he was given 250 cc. normal salt solution in the vein and put to bed in fair condition. His condition not improving, he was given stimulants by rectum and by hypo. Another 250 cc. normal salt with 3 cc. of a mixed infection vaccine was given in the vein. About 3 a. m. his condition became

worse and about 3:30 he died perfectly conscious.

A culture taken at the time of the first operation showed a large non motile bacillus resembling the Anthrax Bacillus, in pairs, ends rounded and encapsulated with characteristic gas production of the Bacillus Aereogenous Capsulatus.

To my mind the great lesson this case teaches is how serious a so-called simple discharge from the ear may become without any apparent cause and how an early and adequate operation will save a patient from such grave consequences.

RESULTS OBTAINED WITH A MODI-FIED VACCINE.

(A Report of Ninety Cases.)

By LOUIS D. GREEN, M. D., San Francisco.

The publicity given to Schafer by the lay press has a tendency to cause medical men to regard with suspicion all claims for the value of the vaccine therapy as advanced by him. This is to be expected, as some of the claims made greatly exaggerate its therapeutic powers. It is to be regretted that such is the case, as the vaccine probably has a distinct value in the field of medicine. By some who have had little or no experience with that particular form of vaccine therapy, it has been denounced as valueless; by others lauded to the skies as a panacea for nearly every ailment that man may be heir to. In both instances there seems

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